

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Notice (2007 KSC 01)

National Environmental Policy Act; Finding of No Significant Impact; Construction, Modification and Operation of Three Facilities in Support of the Constellation Program, John F. Kennedy Space Center, Florida

AGENCY: National Aeronautics and Space Administration (NASA),

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321, *et seq.*), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), and NASA policy and procedures (14 CFR Part 1216 subpart 1216.3), NASA has made a Finding of No Significant Impact (FONSI) with respect to the proposed construction, modification and operation of three facilities on the John F. Kennedy Space Center that are needed to support the next generation of launch vehicles and human-rated spacecraft known as the Constellation Program. These facility actions are required to begin early in the Program due to their long development nature and the need to support early test flights. A more detailed Programmatic Environmental Impact Statement (EIS) is currently being prepared to assess the environmental impacts of the majority of the Constellation Program. This EIS is scheduled to be published in draft form in the fall of 2007.

DATE: This Proposed Action may proceed as of the date of signature of this FONSI.

ADDRESSES: Written comments should be addressed to Mr. Mario Busacca; Environmental Program Office, Mail Code TA-C3, John F. Kennedy Space Center, Kennedy Space Center, Florida 32899; telephone: 321-867-8456; fax: 321-867-8040; e-mail: mario.busacca-

1@nasa.gov. The Environmental Assessment (EA) is available for public review at the Central Brevard Library and Reference Center and the Cocoa Beach, Melbourne, Merritt Island, Port St. John and Titusville Public Libraries. A limited number of hard copies of the Final EA are available for persons wishing a copy by contacting Mario Busacca at the address, electronic mail address, telephone or fax number indicated herein. The Final EA is also available on-line in Acrobat® format at:

<http://environmental.ksc.nasa.gov/projects/documents/KSCConstellationFEA.pdf>

FOR FURTHER INFORMATION CONTACT: Mario Busacca, Lead, Planning and Special Projects, NASA/KSC, Environmental Program Office, Mail Code TA-C3, NASA, Kennedy Space Center, Florida 32899; electronic mail, mario.busacca-1@nasa.gov; telephone, 321-867-8456; and fax, 321-867-8040.

SUPPLEMENTARY INFORMATION: NASA initiated a 30-day public review and comment period for the Draft Environment Assessment for the Construction, Modification and Operation of Three Facilities in Support of the Constellation Program, John F. Kennedy Space Center, Florida by publishing a notice in the *Florida Today* newspaper on February 28, 2007 and by providing copies to the Florida State Clearinghouse. The public review period closed on March 30, 2007. Comments have been considered in the preparation of the Final EA. NASA has reviewed the Final EA and determined that it represents an accurate and adequate analysis of the scope and level of associated environmental impacts. The Final EA is incorporated by reference in this FONSI.

The NASA Authorization Act of 2005 requires NASA to establish a program to develop a sustained human presence on the Moon, including a robust precursor program, to promote exploration, science, commerce, and United States preeminence in space, and as a stepping-stone

to future exploration of Mars and other destinations. In pursuing this new policy, NASA has been tasked with developing the spacecraft, launch vehicles and related technologies necessary to travel and explore the Solar System.

In order for NASA to implement the proposed Constellation Program, modifications to existing Space Shuttle facilities are required. The environmental impacts of those modifications and the operations of new launch vehicles are being assessed as part of a Programmatic Environmental Impact Statement (EIS) expected to be published in the fall of 2007. To meet the proposed Constellation Program development schedule, however, there are several projects that must be started at the Kennedy Space Center (KSC) prior to the completion of the Programmatic EIS due to their complexity or long duration required for implementation, or to meet the accelerated schedule of the first test launch of the new Constellation vehicle, the Ares I. There are several proposed activities to support the Constellation Program that would require an early construction start that are not included in this EA (modifications to the Mobile Launch Platform, Launch Control Center Firing Room 1, the High Bay in the Operations and Checkout Building, and Hangar AF on Cape Canaveral Air Force Station). It is the result of early review and determinations that each of these projects posed little to no environmental impacts and could be Categorically Excluded (CatEx) from further NEPA review.

Two alternative actions were analyzed and are presented. The first is the No Action alternative, and the second is the Proposed Action alternative. Within the Proposed Action, there are several activities. The No Action alternative states that the early development, modification, and operation of facilities to support Ares launches for the Constellation Program would not occur at KSC. When the Shuttle program is completed in 2010, many facilities, including those addressed in this EA, would either be maintained at a reduced level, maintained in long-term storage mode,

or disassembled. Under the Proposed Action alternative, three activities would occur: a new Mobile Launcher (ML) would be constructed, the existing Launch Complex (LC) 39B launch tower would be modified for the test launch of the Ares-I vehicle, and a Lightning Protection System (LPS) consisting of three towers would be erected within the perimeter of LC 39B.

KSC encompasses nearly 56,000 ha (140,000 ac.) on the east coast of central Florida.

Approximately 2,500 ha (6,000 ac.) of KSC are actively used to support space mission operations, with the remaining lands being managed as wildlife habitat. Resources identified that could be impacted by either of the two action alternatives include air quality, wildlife, threatened and endangered species, geology and soils, noise, groundwater quality, and socioeconomics. Potential impacts to resources resulting from the implementation of the two alternatives were identified and placed into the following predetermined classifications: none, minimal, minor, or major.

Under the No Action alternative, socioeconomics would be the only resource potentially affected. These impacts could be major due to the anticipated loss of jobs at KSC, and the primary and secondary effects on the economy of the surrounding area. Some impacts from construction of one or more of the three activities under the Proposed Action alternative were classified as none under the categories of habitats/vegetation, cultural resources and surface water quality. Some minimal to minor effects of construction would be expected for air, wildlife, threatened and endangered species, geology and soils, noise, and groundwater quality, but these would be localized and temporary. Minimal effects would also be expected to the socioeconomics of the area because the addition of construction activities would input monies into the local economy. Some impacts to wildlife and threatened and endangered species could potentially occur, but are expected to be minor if the proposed mitigation strategies are

implemented. These impacts would be anticipated during the modification of the launch tower, and during construction and operation of the LPS. Lighting associated with these activities could potentially disorient adult and hatchling sea turtles on the adjacent nesting beach. Upon completion of the LPS, the tall lit towers and associated grounding wires could also pose strike risks to migrating birds flying along the coast at night and birds flying through the launch pad area during the day. Impacts from operations would not be seen except possibly in the categories of wildlife and threatened and endangered species. All of these would be related to the LPS and would be mitigated for as described below.

A number of mitigation strategies were proposed for the design and operation of the LPS to reduce impacts. Those mitigations that would be implemented are anticipated to reduce impacts to a minor level. These include: 1) using the minimum number and height of towers possible; 2) having the LPS towers oriented so that only one leg of the tower triangle is located near the beach; 3) using the minimum number of grounding wires of the greatest diameter and most visible material feasible; 4) minimization of Federal Aviation Administration (FAA) required lighting, using white lights flashing at 40 flashes/minute; 5) minimization of task lighting, equipped with on-off switches and timers; and 6) adherence to the KSC Exterior Lighting Guidelines whenever possible. In addition, a monitoring program to evaluate the effectiveness of the mitigation strategies is proposed for sea turtle disorientations and bird strikes. Neither the No Action alternative nor the Proposed Action alternative would be expected to produce any consequences related to Environmental Justice as all activities are located away from population centers. The Constellation Program would not be expected to affect the surrounding communities any differently than the current programs at KSC.

On the basis of the Final EA, I have determined that the environmental impacts associated with the proposed action would not individually or cumulatively have a significant impact on the quality of the human environment.

RESPONSIBLE OFFICIAL:

Original Signed by

W. W. Parsons
Director
John F. Kennedy Space Center
Kennedy Space Center, Florida

____ May 2, 2007 ____
Date